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The 7 selected papers in this pamphlet, which were presented at a conference on doctoral study in November 1968, are specifically concerned with the doctorate in special education. The unique factors of the special education doctoral program are discussed in the first paper. The second and third presentations deal with the variety of approaches to the education of the handicapped, and the educational objectives and curricular requirements of doctoral programs in special education. The fourth paper discusses the Joint Doctoral Degree Program in Special Education which began in 1967 between the University of California at Berkeley and San Francisco State College. The assessment of the personal characteristics and projected goals of a potential candidate as well as the university's resources for providing an adequate program and training environment are discussed as bases for the admissions guidelines presented in the fifth paper. A proposed tailor-made doctorate at the university of Washington is presented in the sixth paper. This program would match the needs of the field and the skills of the faculty with the talents and interests of the individual doctoral student. The seventh presentation deals with the future of doctoral programs in special education, with particular reference to roles, curricula, organization, and administration. (WM)

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Doctoral Preparation in the Field of Special Education

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DOCTORAL PREPARATION
IN THE FIELD OF SPECIAL EDUCATION

Selected papers of a conference on doctoral study held at
Tucson, Arizona, November 25-26, 1968

Edited by
Dr. Gene Hensley
and
Dorothy P. Buck

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Western Interstate Commission for Higher Education
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PREFACE

For several years, the Western Interstate Commission for Higher Education has been interested in problems relating to advanced graduate preparation in special education. WICHE's Special Education and Rehabilitation Program has conducted studies and institutes which highlight issues relating to this topic. This project is one of several mental health and related programs which provides assistance in dealing with problems associated with professional training, service, and research. It seeks to provide assistance to western state governments in developing and increasing services to exceptional children and adults, in implementing and improving programs of professional preparation in both special education and rehabilitation, and in facilitating research, evaluation, and expansion of these fields.

The conference which produced these proceedings was concerned with the doctorate in special education and is one of a number of efforts to encourage the continuous study of professional training in our colleges and universities. It is hoped that the papers contained herein will contribute to a greater understanding of the problems which characterize research, service, and training in this important profession.

Acknowledgements are due George Leshin, Chairman, Department of Special Education, University of Arizona, for his assistance in planning and executing this conference; James Q. Affleck, Anne Carroll, Glendon Casto, Joe Glenn Coss, Robert J. Currie, V. Knute Espeseth, George Fargo, Samuel A. Kirk, Wayne D. Lance, Joseph S. Lerner, Francis E. Lord, and Harry V. Wall for their excellent presentations; William F. Hall for his analysis of the discussions; and all conference participants for their outstanding contributions.

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Director

Special Education and Rehabilitation Programs

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WHAT IS UNIQUE ABOUT THE DOCTORATE IN SPECIAL EDUCATION?

Samuel A. Kirk
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Before World War II, we had no programs designated as doctors' programs in special education. Most of the people in the field at that time were individuals like Francis Lord and myself who got our degrees in some other area, like psychology or education, but had some experience in the field. I'm glad to see Dr. Lord here today because it was many years ago when he and I observed what he calls "Rat 100" in the laboratory of the psychology department.

Why a Degree in Special Education?

The few people who had doctors' degrees before the war got their degrees in areas other than special education. We can always raise the question "Why a degree in special education?" Why not get your degree in educational psychology, in clinical psychology, in sociology or a related field and gain experience in the area of special education?

For a number of years after the war, many people said that there is no such thing as a doctor's degree in special education, that what we need is a doctor's degree in one of the behavioral sciences. In 1945-1948, Cruickshank at Syracuse said that there is no program for a doctor's degree in special education and that clinical psychology is the closest. The relationship between clinical psychology and special education is, in a sense, historical.

In the early part of this century, Witmer started a psychological clinic for children at the University of Pennsylvania. In order to analyze children who were referred because of some problem, he found himself diagnosing children who were mentally retarded, speech impaired, or auditory handicapped. At that time, he introduced within his clinic some programs of remediation in speech correction as well as classes for the mentally retarded. The first book on exceptional children that was written in this country was by Witmer. This man asked teachers in his clinic to write the chapters and to explain what this field is all about. Hence, the early relationship between clinical psychology as such and special education.

After the war, clinical psychology became associated with psychiatry. At a conference in Boulder, Colorado, clinical psychologists, because of the subsidy from the Veteran's Administration for clinicians to work with mental patients in mental hospitals, became more interested in working with adult patients.

In a sense, special education lost the field of clinical psychology shortly after the war because there were few child psychologists being trained except in a few child development laboratories like those at Minnesota, Iowa, and Berkeley.

Special education evolved from related disciplines and, after losing clinical psychology as a related field, we had to prepare people more specifically to work with children—with problems of the mentally retarded, the deaf, the blind, the crippled, and the emotionally disturbed.

Personnel Needed

For that reason, we began asking the question "What is a doctoral program in special education?" The first thing we had to analyze related to the kinds of jobs available to people in the field who were trained beyond the master's level. We knew that there were positions for teachers and for supervisors in public school systems, but these were at the service level in the public schools. We asked the question "What kind of people with doctorate degrees do we need?" We found that we needed three types of people: (1) administrators of special education; (2) college teachers of special education (those who could prepare teachers in a college); and (3) those who could conduct research in special education.

Within the teacher education field and the college teaching field there evolved two kinds of personnel. One kind dealt primarily with teacher training—the training of teachers of the deaf, the blind, the crippled, the mentally retarded, and those that required a certain kind of a background and training. Another college-teacher type of individual was an individual who was more theoretically trained and who would be able to prepare graduate students to do research. There were few jobs that required pure research because we could always hire a research person outside of special education. However, we needed people who could teach courses at the advanced level, especially for the doctoral candidates and who could also conduct research.

If the jobs in special education are for administrators, college teachers to prepare teachers, and college teachers to teach advanced courses and to do research, we limit our field and separate it somewhat from a doctor's degree in clinical psychology, educational psychology, or even developmental psychology or child development.

The Importance of Experience and Training

Most universities that accept doctoral students in special education have a selection factor; namely, that the individual being admitted for a doctor's degree must have training and experience in at least one of the areas of special education. In other words, that individual who is selected for a doctor's degree is different from someone pursuing a degree in clinical psychology, educational psychology, or child development, in that this individual has had training and experience in special education. He is primarily a teacher of the mentally retarded, or a teacher of the deaf, or a teacher of the crippled before he becomes a candidate for the doctor's degree.

Not all universities have required previous training and experience. As a result, we sometimes receive applications from graduates who want to train the deaf, the blind, the crippled, or the mentally retarded who have taken a few courses in special education and have no teacher training in the field or experience relating to their degree. They have taken statistics and theory courses and have fulfilled the general requirements for a doctor's degree in education, but they lack the appropriate training and experience.

It is very difficult to conceive of an administrator who is going to play a leadership role in a public school system who has had no experience in the field or any training in teacher preparation, although we do have administrators of that kind in public schools.

I recall that some years ago in Illinois, the legislature appropriated $5 million to expand special education in the state. The state then required that schools employ a director of special education and that certain training be required of the teachers. What happened? The superintendent of schools in the late 40's and early 50's had to designate someone as a director of special education and, since the administrator didn't always consider this a major job, he sometimes appointed one of his inadequate elementary school principals. To get this principal out of the schools, the superintendent gave him the job as director of special education.

We had hundreds of these cases—no training or experience in the field but designated as director of special education. Some of those people have done a very good job. They learned on the job because people can learn this way. They don't all have to take Special Education 100-101 or 102. If they are smart and if they are serious, they can take courses in the summer and can continue to improve. We have some good people in the country who have improved themselves without taking the courses, but I think these are exceptions rather than the rule.

One high school principal decided that there was too great an emphasis on football and athletics in the high schools to the detriment of academic work. He attempted to decrease the emphasis on football to the consternation of the board of education. They hired a superintendent with the provision that he fire this man because he was decreasing the status of football in that particular high school. Following the dictates of the board of education, the superintendent fired this man.

The principal took the case to court. After about two or three months, the board decided they couldn't win, recognized that he did have tenure in the school system, and admitted they had to give him a job. At that time, the superintendent was feeling a little pressure to appoint a director of special education in the public school. In order to get the state subsidy, he designated this man, who had been fired and reinstated, as director of special education. The man came to summer school and said, "I am really going to work to build something because I don't think the superintendent is really interested in special education." He did build one of the best programs in special education.

Not all of these practices turn out good, but we cannot continue a

profession by selecting people that aren't the best in a school system and designating them as directors of special education. We have to ask the question "What is unique about an administrator of special education as far as his training program is concerned at the doctorate degree level?"

He should have a knowledge of the programs of most areas of special education. He should know the identification procedures used with the children; he should know the general program; he should know what constitutes a good teacher in each of these fields. He should be able to differentiate a good teacher from a poor teacher on the basis of experience. In order to be a good administrator, a person probably should also have considerable experience in teaching, in school programs, and in training in various areas of special education.

Of course, he can get training and experience up to the master's degree level. We have to ask the question "What must he have beyond the master's degree in order to become a more efficient administrator?" This is one problem I would like to have discussed.

A Study of Administrators

Howe made a study of administrators in the school system and compared their ideas and attitudes in relation to the program of study which they had pursued in college. He found several different types. The question was asked "What kind of a program do you have in your school system today?" One type of response was "We have three classes for the mentally retarded." The next question was "What did you have five years ago?" The response was "Oh, we had only one class for the mentally retarded and now we have three." The next question was "What are you going to have five years from now or what is your program going to be five years from now?" The person said, "Well, we're going to have six classes for the mentally retarded instead of three." That's one kind of administrator.

Another kind of administrator didn't pay much attention to quantitative development but asked other questions, questions concerning revision of the curriculum to see whether the procedure was right. We need administrators who are innovative, and creative, and who know the school system in general. They can't be specialists only in special education. They have to relate it to the other aspects of the public schools.

Consequently, training programs at the doctor's level probably should concentrate on courses and field experiences that would assist administrators in *developing* programs within the public schools rather than just routinely administering them. We need to consider the kinds of courses they should have, the nature of their experiences. Unless we do, special education can be on the spot. We have been riding high for a long time. Unless we are able to move faster, we probably will not maintain the status we have had.

College Teachers

What about college teachers? One of the things that has happened, especially in the larger universities, is a great emphasis on research. Some

of the large universities having research as the primary goal for the doctorate program are giving students a lot of courses in statistics, research methodology, and theory, but very little on how to train teachers of the exceptional children. We are weaker in this area than in any other.

If you write to University X, Y, or Z, and say, "I want somebody to train teachers of the deaf or teachers of the mentally retarded," you might get a lot of applications from people who really don't qualify as teacher trainers. Dr. Lucito of the U.S. Office of Education recognized this fact when he tried to set up some programs that would concentrate on the preparation of college personnel that can do an innovative, creative, maybe revolutionary job in the preparation of teachers in all areas of special education.

We are very short of people of that kind. It is much easier to get someone in research than it is to get someone who is a college teacher—who can prepare professional personnel in special education. I'm not talking about the graduate professor who is going to do research and teach advanced courses. I'm talking about the person who is going to prepare teachers of various kinds in special education and to prepare them a lot better than we are preparing them today.

Selection

What should such a person receive in his graduate program? What kind of courses should he have? What kind of field experiences? These are questions that we should try to answer. A person like this must have had teaching experience in the area in which he is going to train teachers. But we also have to look at his teaching experience. A person can get a position, for instance, after taking a few courses in characteristics of the mentally retarded and curriculum for the mentally retarded, or a few hours of practice teaching in the secondary schools. He can then teach in the secondary schools and then move to a college to prepare teachers for kindergarten, primary, elementary, and secondary levels with no related training or experience.

We have many people that have very limited experience and very limited training. We can't just say, "Two years of experience is required." We have to look at the kinds of experience they have before we admit them into graduate school. If they don't have it, we must provide opportunities in the graduate program that would fill in their background and training experience before we allow them to get a doctor's degree in that area. One can have one year of experience repeated 20 times in schools, and we know people with two years of experience who are a lot better than people with 20 years of experience.

Nature of the Program

The second point relates to the nature of the preparation. "I was taught this way. Therefore, I'm going to teach people to teach the same

way." That's what a dancing teacher does. If you want to learn dancing, you learn how to dance like the dancing teacher, and then you teach other people to do it. They perpetuate the same system.

In special education we want people who can break away from traditional programs and improve them. What kind of courses would improve the students' ability to develop programs? Courses should relate primarily to child psychology and child development. I would like to see people majoring in teacher education with a background in child development and child psychology, courses in curriculum building, courses and experience in programmed learning, learning theory, and behavior modification.

They should learn about these fields from the behavioral sciences at the graduate level as they work toward their doctorate degrees, and they should also acquire some knowledge of research so they can interpret some of the current research that is being translated into practice. You have read many reviews of research. The reviewers make very little attempt to translate research into practice. Practice can't come entirely from research, but we might get 10 percent. Who's going to make this translation of research into practice for the teacher? The ones that have the best chance are the college teachers of special education.

How do we set up the program for the doctor's degree to assist them in this development? I recall a review on discrimination learning done by a very well known man in child development. After reviewing about 50 articles on discrimination learning with the mentally retarded, he concluded that (1) the studies are sporadic and very few conclusions can be made from more than 50 studies, and (2) discrimination learning problems are possible with the mentally retarded. We have done it with worms, rats, and monkeys—I don't know why we have to do 50 research studies on discrimination learning to come to the conclusion that we can do that kind of research with the mentally retarded.

Another profound conclusion that came from this study was that dull students learn slower than faster students. If we tell a teacher that 50 articles on discrimination learning have been written and that we found that "dumb kids" learn slower than fast kids, the teacher ought to laugh at us. We're telling her something she already knows and something that Aristotle knew many years ago. We should ferret out something that is translatable into programs for the mentally retarded. We want people in special education that can find out the truth about experimentation and research and move it toward implementation.

Research

Another point I would like to talk about concerns the graduate faculty and research. We need, within universities, a graduate faculty that can teach courses in special education beyond the methods courses. We are faced with the question "What is a graduate course, or an advanced graduate course in special education over and above the technique courses, the methods courses, the courses that we offer people at the bachelor's level or at the

master's level?" We need to amass the information from the related academic disciplines and integrate it into a program.

One of the programs that has become standard throughout the country at the graduate level is the advanced program in mental retardation. We can ask the question of students in special education "What are the biological contributions to special education?" The person who teaches should know something about the biological aspects of mental retardation and be able to integrate it to practical programs.

Secondly, what is the psychological contribution? What implications do these studies in discrimination, attention, and personality have in serving the mentally retarded, particularly in regard to the development of the field?

Thirdly, what contribution do sociology and rehabilitation make to the mentally retarded as we know it in education? Also, what does experimental education and research in general education have to do with the development of programs?

For a graduate faculty member to be able to teach a course of that kind he has to be a psychologist, a sociologist, and a child development specialist. He has to know quite a bit more than just the techniques of teaching, and he has to know something about research.

I usually judge an advanced graduate course from the point of view of how many doctoral disserations emanated from that course. Where do the students get their ideas for a doctor's dissertation? They get them from graduate courses. They evolve ideas and problems that have some relationship to the education of the exceptional child. Some professors can teach a course year in and year out, and never does a doctor's thesis emanate from the particular course. Another course may produce all kinds of dissertations. That's another criterion of a good graduate course in special education.

Importance of Related Disciplines

We can look at almost any field of special education—for example, the area of the deaf. We can begin by asking the question "What contributions can related disciplines make to a doctorate in this field?" We are interested in knowing what related disciplines can provide the doctoral candidate that will enable him to develop the field of the deaf. We know that education of the deaf is related to speech, linguistics, psycho-linguistics, learning, and programmed learning. We also know that many of the techniques used in the field of the deaf are related to technical knowledge in other fields.

Within this program, I would expect a doctoral candidate to pursue advanced courses in related disciplines, as in the field of medicine. A medical student becomes a practitioner. He is not necessarily a scientist or a researcher. But in order to become a doctor, he must study related disciplines which contribute to his practice. He must know physiology, neurology, and biochemistry. In other words, he must become thoroughly rounded in related biological disciplines.

I feel that a doctor's degree in special education involves the same principle. The special education doctorate should not be confined to a number of courses in special education but should include courses from related disciplines which will lead to the implementation of the program either in practice or in research.

The Graduate Faculty

An essential ingredient of any doctoral program is the graduate faculty. How do you select a person in your college to teach graduate courses in special education in contrast to those who can teach practical courses? How do we train students in the university at the doctoral level to operate at the graduate level where competencies in research constitute an important objective while, at the same time, prepare college teachers whose interests and expertise are primarily in the preparation of teachers? We need both, but sometimes we can't get both and we attempt to combine them.

I have raised some questions relating to the uniqueness of the doctorate in special education, particularly in regard to the selection of candidates, the nature or content of curriculum, and the importance of contributions from related disciplines to doctoral training in the field of special education.

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A DEPARTMENTAL STANCE OR ECLECTICISM IN THE PREPARATION OF DOCTORS OF SPECIAL EDUCATION?

Joe Glenn Coss
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It is interesting and refreshing to note that colleges and universities which have had departments of special education for many years, and which have offered the doctorate with a major in some field of special education, are becoming concerned with their programs.

Perhaps faculties are self-conscious about their own preparation for the field. While this is a healthy concern, it need not be one for which apologies are in order. Special education, as such, is still so new that pioneers constitute important segments of our faculties.

Several Approaches to Special Education

Prior to 1800 there were no schools of dentistry. It was customary for doctors to perform operative dentistry, blacksmiths extracted teeth, and oral surgery was done by barbers. As the importance of proper oral care became recognized, schools of dentistry made their appearance. They were dominated by doctors of medicine who had special interests in dental practice. Eventually enough dentists were graduated that they could take over the faculties and develop their own programs.

It would be surprising if many members of this symposium could honestly say that they received their doctorates in special education. For very good reasons the psychologists became the first to see the potential in describing the unique needs for education of the handicapped and the gifted.

Special education owes a great debt to these people, but as universities and colleges graduate students whose training has been concentrated on the education of the handicapped and/or gifted, we can expect these new scholars to take over the departments of special education.

We may well ask ourselves what kinds of programs we should expect these new people to develop. If we reflect a few moments on our present departments, we will note that they are staffed with psychologists, speech and hearing specialists, counselors, rehabilitation experts, administrators, and curriculum specialists. Each brings to the department his own background and experience.

If we accept a variety of approaches to the education of handicapped children, we must also accept these approaches to the education of our doctoral candidates, and thereby accept eclecticism. This is an admission that we are still in an experimental stage and have few definitive answers. At the present state of the art this may be a wise posture.

Is it distressing to learn that some of our most distinguished special educators are beginning to express concern about our approaches, notably Lloyd Dunn in his recent article in the Council on Exceptional Children journal?[1]

The Need for Realistic Objectives

There is ample room for divergence in *rationale* as to how we conceive our role in the education of the handicapped. Lynch, in a Distinguished Lecture at the University of Southern California, cited five rationales for the education of the mentally retarded. The first conceives of teaching as a process of removing or alleviating the deficiency itself. The second stresses compensation for the deficiency. The third sees teaching as a process of training for social competence. The fourth emphasizes training in key skills. The fifth sees retardation as entailing unique problems of inadequate motivation and self-esteem. These are philosophical view-points, and though they may not be contradictory, which should we emphasize with our doctoral students?

Bloom *et al.* decided that educational objectives stated in behavioral form have their counterparts in the behavior of individuals, and that descriptive statements of such behavior could be classified.[2] His group decided to by-pass the problems of philosophy by sticking strictly to classifications of student behavior. His three domains—cognitive, affective, and psychomotor—provide areas in which to develop certain objectives, but we must realize that these are not approaches but only categories of objectives which, taken together, form the whole.

For many years, we have been keenly aware of the dichotomies in psychology. We have the bifurcation of nature and nurture, and the Freudian psychoanalytic position versus Watsonian behaviorism. As educators can we readily identify the educational objectives which we may hope to reach by using the techniques inherent in such positions? Are they objectives which are realistic, or are they hypothetical?

What Kind of Special Educator?

What kind of special educator do we wish to develop at the doctoral level? Without attempting to exhaust the subject, I shall list some of the careers which we could expect graduates to follow in the broad field of special education.

Research. Surely we must endorse and encourage research if we expect to stay in the fore-front of educational progress.

Teacher of teachers. We accept this pedagogical obligation without question. It is for the preservation of the species!

Specialist in a category. Rather traditionally we have approached our doctoral programs with this in mind. A doctor must be a specialist in something, and since we have had discrete categories for some time, it seems logical to ask our candidates to specialize in one of them.

Psychologist. We tread on thin ice if we do not endorse this as a career since department staffs are drawn mainly from this discipline and feel most secure in working in this area with candidates.

Curriculum specialist. For a long time we have given lip service to the concept that special education is special because the instructional content is developed on the basis of children's needs. Unfortunately we tend to ignore this as a career.

Administrator. The proliferation of special schools means that we must devote more energy and attention to the education of those who will direct programs at the operational level.

Technologist. Recently published studies indicate that instructional technology is in its infancy, but will soon become a major factor in all education. Teaching devices of various kinds will help make all education special.

Generalist. Dare we consider this as a career? Perhaps not, but we should recognize the fact that most of our graduates will be called upon to function in this capacity.

With some deliberation I have put the cart before the horse because in our business this is the traditional position. We set up a curriculum and then offer it to our students. We like to teach our specialties and can usually find some valid excuse to justify their introduction to the curriculum. In time, of course, graduate students will begin to question and eventually rebel because of concern over the relevancy of what is being taught.

The Need to Examine Course Sequences

We have little reason to be smug about student turmoil. We should not deceive ourselves into believing that it is inspired only by the black students, the flower children, or the communists. The trouble at Berkeley and at Columbia was at least partially rooted in the fact that students did not have a voice in school policy or curriculum.

The time is already overdue when departments should take a second look at their course sequences to determine if objectives are clear and educationally sound. Does each course contribute to an objective, or is the course still there because a professor enjoys teaching it? To what extent have the desires of and consultation with students been considered in the selection of objectives?

The comprehensive examination is almost an anachronism. We want our doctoral students to specialize in the sequence we have constructed in the area of their major, but we force them first to jump a hurdle which is frequently bristling with trivia, and expect them to memorize material which they never find useful, and then promptly forget. Would this effort be more fruitful if it were dericted toward something more relevant?

Should we, then, place the horse before the cart by asking ourselves what is truly important? Can we consider the preparation of teachers of teachers as the prime task of our doctoral programs?

Those who work directly with exceptional children soon become aware of many of their problems. Often they find the children caught up in a machine-like organization which starts and stops on time, which is controlled by laws, rules, and regulations made for non-exceptionals, and whose employees are poorly prepared and occasionally antipathetic. In this milieu they are expected to function much like the normal. The extra-educational demands, such as special bussing, counseling, testing, therapy, and convalescence and the higher frequency of illness, cut into the time left for education. Compensation for time lost is certainly one problem. Either the curriculum must be reduced, or education must become more efficient. This suggests the use of techniques or devices which will offer relevant educational experiences in the reduced time available.

This brings us to curriculum because we must be sure that we offer first those things which are significant and necessary. The enrichment process may then follow as a second priority. In order for the teacher to assure himself of this, he must pause to ask, "What is important for this child to learn at his stage of development which will be commensurate with his ability?"

Are we asking our doctoral candidates to study these problems?

The Need to Emphasize Service to Handicapped Children

Today we have available some very sophisticated equipment for teaching and learning. We are also painfully aware that it is generally too expensive for common use. However, if the equipment is effective in reducing the educational problems of exceptional children it is too expensive not to use it. If billions can be spent on space technology and war materials, it seems anomalous that educational technology can have so little priority.

Responsible work and the satisfaction derived from it are basic to most of us. For the handicapped, this usually means a program of rehabilitation to develop some degree of economic sufficiency.

Those who have worked closely with handicapped children know that they are not simply normal children with handicaps. The orthopedically handicapped, those with educational handicaps, and those who are educationally mentally retarded all have frustrations which affect their attitudes toward learning. All children need motivation, but the handicapped are sorely in need of it.

In developing a doctoral program designed for *service to the education of children*, we should go beyond the traditional courses which emphasize etiology, methods, medical and psychological aspects, and identification. We should consider educational technology and how it can save instructional time and be used to individualize further instruction. We should take a hard look at curriculum and its relevancy for each child, and in so doing consider how it can be used for motivation. The curriculum will naturally lead to rehabilitation wherever this is pertinent.

For those in our doctoral programs who intend to become teachers of teachers we must concern ourselves again with the relevancy of their preparation. Are we ready to maintain a semblance of our present categorical divisions? Where education is special, it is special because it is designed for each child. Teachers of children must be prepared to analyze the deficits, the potentialities, and skills of each child, then develop an educational program for each. Lack of time makes this impractical, so we must prepare teacher specialists for these duties. Many exceptional children have multiple deficits and teacher specialists must be able to resolve them with some adequacy. This calls for broad preparation. It probably also calls for some skills in programming and writing computer or machine programs for children. Are we preparing our future faculties for this kind of approach to the education of teachers of the handicapped?

Professors in special education usually attempt to develop unique approaches or models for dealing with some area of exceptionality, or they are brought into a department due to the renown of a model developed elsewhere. (Proselytism is an ancient game in our profession.) As the literature and critiques begin to enhance the model nationally or internationally, the department finds that it has acquired the reputation and is known mostly because of that approach. Promising new programs attract both students and fellowships.

The search for truth is being ever narrowed because of the mass of research documentation verifying or nullifying hypotheses. The theories which a century ago could survive the life-time of the author, now may be found defective or useless before the book gets into print.

We have the tendency to espouse the new, and move from one approach to the next. Departments, which at one time had renown, may find themselves with a desiccated program.

Should professors no longer seek to find best solutions to the problems of educating the handicapped? Of course not. To remain viable and productive the search must proceed.

A Stance to Take

A problem, then, is to determine whether a popular and appealing approach to the education of exceptional children should be endorsed by a department, or whether the department should maintain an eclectic viewpoint. Is the eclectic position one of cowardice or prudence? Would it not be better to be known for a position, even for a while, than to remain colorless but academically safe? Psychology has been over this route, from Freud to Jung to Adler; from James to Watson to Skinner. We could cite many other legitimate examples, and we could also cite the charlatans who caught the public fancy for a short time.

The personality of a great teacher attracts a following which is captivated by the sincerity and logical reasoning with which he presents his view. Are we to reject the concept of the great teacher and accept eclecticism? Of course we might solve this dilemma by having a department composed of

great teachers and each with his own renowned approach! We could then be eclectic in the grand manner, but could we be sure that each approach was educationally sound?

Today the great teacher is enmeshed in the details of developing courses, writing textbooks and articles, correlating activities, teaching, writing grant proposals, doing research, and counseling students. The day of the armchair educator is past. No longer can the great teacher approach his subject philosophically, gathering his followers at his feet to engage in intellectual repartee. He must, instead, be immersed in the literature, cognizant of research techniques, skeptical of unconfirmed statements, and secure in the knowledge that his approach is based on psychologically accepted principles.

If a department is ready to accept the concept that education is special when it meets the individual needs of handicapped children it is ready to accept a position. Unless there be ambivalence in our *educational* objectives there can be no eclecticism. Categorical compartmentalism is a form of fragmentation of the objective of educating individual children. It cannot be conceived as eclecticism.

There is a stance in the preparation of doctors of special education that we can take, and that is to accept a position based on educationally sound objectives. Our concern is with education, although we are constantly tempted to think of ourselves as clinicians. We surely approve of those tests, activities, treatments, and procedures which researchers to date have confirmed and endorsed as being effective in the education of the handicapped. We certainly believe in developing more precision in those things which competent educators accept. Any approach to the education of doctoral candidates which meets these criteria should be promoted. Departments of special education can support that stance.

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[1]Lloyd M. Dunn, "Special Education for the Mildly Retarded—Is Much of it Justifiable?" *Exceptional Children*, September, 1968.

[2]Benjamin S. Bloom (ed.) *et al. Taxonomy of Educational Objectives, The Classification of Educational Goals.* New York: David McKay Company, Inc., 1956.

COMMENTS ON THE DUAL DOCTORAL PROGRAM

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There were 17,865 doctoral degrees granted in the United States during the fiscal year 1966.[1] During this year the western states, as defined by WICHE, granted 3,535 degrees or approximately 20 percent of the awards.

During the same year, 128 degrees in special education were awarded in the United States. Since this area of specialization is not always clearly differentiated from the fields of education, no doubt some individuals who received degrees in special education are not reported properly. It seems reasonable to believe that doctoral programs in special education are expanding throughout the United States. In the WICHE survey of 1960, there were no doctoral programs in special education in the public universities on the West Coast.[2] Today there are at least four with two being combined programs between universities and state colleges. Institutions projecting programs are caught in the controversy over the dual degrees. A critical question becomes "Shall we offer the Ph.D., the Ed.D., or both?"

The plan of dual doctoral degrees is well established in American education. The Ph.D. in education was awarded by Clark University in 1881. The Ed.D. was first granted by Harvard in 1921. The former degree has come to be known as the research degree and the latter as the professional degree.

The Ph.D. is clearly identified with research in all the academic disciplines within American universities and enjoys a high status in the academic community.

The professional degree, whether in education or other fields, continues to be under review and criticism. Much of the criticism of the Ed.D. no doubt originates from the general antagonism which prevails toward professional education. However, some institutions have no doubt reduced standards and cheapened the degree. It appears at this time that some modifications are being made in the requirements for the Ph.D. which may result in reducing the current attractiveness of the professional degree.

The language requirement for the Ph.D. has been the single greatest difference from that of the Ed.D. Two languages have been required. However, a number of institutions have in recent years reduced the requirement to one. Within the past year or two, another significant change has been made in some major institutions. Some institutions which are important in the field of special education have now eliminated the foreign language competency as an institutional requirement. Three examples are: Michigan, Ohio State, and Syracuse. Each school within these universities, or the

student's committee, decides whether competency in language is desirable. It would appear that, where such modifications are being made, the distinction between the two major degrees has been largely erased.

General Differences

While the dramatic changes in the Ph.D. institutional requirements are being weighed, we are confronted with the prevailing practice of dual programs. We cannot predict the future, but the present and past are comparatively clear. Historically speaking, some distinctions between the two degrees are apparent.

1. Naturally the Ed.D. is usually under the control of the professional school, while the Ph.D. is a university degree and is controlled by a graduate school or some similar body.

2. Reference has already been made to the absence of a language requirement for the Ed.D. However, there are exceptions. The University of Texas requires one language for the Ed.D., and Peabody provides options for the Ed.D. which include a language.

3. The Ed.D. program sometimes imposes more formal course work than the Ph.D.

4. The Ed.D. dissertation often departs from the high scientific style required for the Ph.D. Also some institutions do not give course credit for the Ed.D. dissertation.

Common Elements

Some common elements between the two degrees may also be noted. In a recent study the author compared the requirements of 14 universities which were offering post master's federal fellowships in three or more areas.[3] Here is a summary of the unit requirements at each institution and a direct comparison for universities which offer dual programs.

UNIT REQUIREMENTS FOR DOCTORAL PROGRAM AS REPORTED IN PUBLISHED BULLETINS OF THE UNIVERSITIES

	Ph.D. Degree	*Ed.D. Degree*
Columbia		
Colorado State College		90 qtr. hrs. beyond M.A.
University	75 grad. points*	90 grad. points
University of Illinois	8 units plus** 8 units for diss.	16 units. No credit for dissertation
University of Iowa	90 grad. hours	
University of Kansas	Equivalent of 3 full years of grad. study	Equivalent of 3 full years of grad. study
University of Minnesota	3 academic years of graduate study	

Peabody College	108 quarter hours excluding research tools. 54 hrs. must be grad. courses	108 quarter hours excluding research tools. 54 hrs. must be grad. courses
University of Pittsburgh	90 units w/minimum 60 units of course work; 18 research cr.	90 units w/minimum 60 units of course work; 18 research cr.
University of Texas	No minimum set	No minimum set
University of So. Calif.	Equivalent to 3 yrs. graduate work	Equivalent to 3 yrs. graduate work
University of Syracuse	90 semester hours	90 semester hours
University of Virginia	No specific course requirements	Minimum of 78 semester hours
Wayne State University	135 quarter hours	135 quarter hours
University of Wisconsin	72 units	

*1 point (at Columbia) = 1 semester hour
**1 unit (at Illinois) = 4 semester hours

One notes that in the ten dual programs there are two differences in the unit requirements for the Ed.D.—Columbia adds 15 units to the Ed.D., and Virginia specifies the hours while the units for the Ph.D. are not specific.

Since the Ph.D. is considered to be the research degree, a comparison of requirements relating to courses in research and statistics was made, and the results are summarized briefly below for the dual program.

COMPARISON OF RESEARCH REQUIREMENTS IN INSTITUTIONS WITH DUAL PROGRAMS

Institution	*Ph.D. Degree*	*Ed.D. Degree*
Columbia	Statistics and Methods of Research	Same
Illinois	Competence in Statistics and Research	Same
Kansas	(Not Shown)	Ability to use Statistics, Evaluate Tests, Etc.
Peabody	12 hours	1 or 2 Languages or options in Statistics and Research 8-16 Hours.
Pittsburgh	Completion of Course Work in Research	Same
So. Calif.	Statistics or Statistics and Educational Research	Same
Syracuse	Defined by Advisor. Language, Statistics, Computer Techniques	Same

Texas	Evidence of Outstanding Academic Research and Writing Competence	Same
Virginia	(Not Clearly Specified)	Same
Wayne	(Not Shown)	Research Techniques—18 Hours

While our data are incomplete and perhaps in practice the printed requirements are subject to some modification, one must conclude from this sample of universities that there are no clear-cut consistent differences in the research discipline given the candidates for the two degrees.

Future

The professional degree is the product of the schools of education—the schools we represent. We, as members of our struggling schools, have a responsibility to continue to strengthen this degree if we expect to save it. In many respects, it is a compromise with the Ph.D. and fails to have the strong unique features which it should have to justify it. If the Ed.D. degree is to be retained, it should be strengthened in order to make it more *professional.* Three suggestions are set forth:

1. Require a broad background of professional experience of all candidates, perhaps teaching experience in two or three areas of special education.

2. Require at least three years of residence in order to complete a comprehensive study of the entire field including some knowledge in supporting fields.

3. Require an in-depth internship which provides an opportunity to deal with professional problems in a multi-disciplinary setting.

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[1]*Doctorate Recipients from United States Universities, 1958-1966.* Washington, D.C.: National Academy of Science, Publication 1489, 1967.

[2]*Teachers of Exceptional Children.* Boulder, Colorado: WICHE, 1960.

[3]Francis E. Lord, *The Doctorate in Special Education.* Los Angeles: California State College, 1966. Project Report OE 6-10-051, Bureau No. 5-8181.

THE JOINT DOCTORAL PROGRAM IN SPECIAL EDUCATION

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The Donahoe Higher Education Act of 1960 designated the University of California the sole authority in public higher education in California to confer the doctoral degree except as it may enter into agreement with state colleges for awarding a joint doctorate in selected fields. This was in recognition of the fact that certain programs of professional preparation were not available in publicly supported higher education in California.

After five years of planning, the regents of the University of California and the trustees of the California State Colleges implemented the Joint Doctoral degree in Special Education between the University of California at Berkeley and San Francisco State College. Commencing in the fall semester, 1967, four students were jointly admitted to the two institutions to proceed on programs leading toward the Ph.D. or Ed.D. degrees.

Three fields of special education were selected to initiate the program. They were, and are presently, the fields of mental retardation, visual handicap, and the deaf and hard-of-hearing. In time, other fields will be included until all areas available are part of the program. Major emphasis will be on the preparation of personnel for service in the following activities: (1) curriculum development; (2) supervision of programs; (3) administration; (4) college teaching; and (5) research.

Doctoral level seminars have been added to the curriculum in special education at San Francisco State College. Internships in curriculum development, supervision, administration, and college teaching are being utilized to provide additional practical experiences. Research opportunities are available through the facilities of the college and university as well as the Bay Area public schools, residential facilities, clinics, and community agencies.

The program is jointly administered by the Schools of Education at both institutions. In addition, the facilities and staffs of the School of Public Health, the University of California Medical Center, the Langley-Porter Clinic, and the several departments of the university and college will be available. Research equipment including computers, laboratory facilities, and other aids are available on a cooperative basis. Students will be encouraged to select related fields of education such as educational psychology, guidance, higher education, and child development as well as anthropology and sociology to supplement the major emphasis in special education.

High standards for admission to preliminary candidacy have been established. A minimum of two years of full-time study is required beyond the normal M.A. level, though completion of the M.A. degree is not a requirement. The usual language requirement for the Ph.D. degree and research tool competency for the Ed.D. degree are required. A thesis jointly

guided by a committee representing both institutions will be required of all candidates. A system of joint advisement and guidance has been established to aid students in program planning and professional development.

Nature of Relationship Between the Two Institutions

1. Periodic conferences were required between San Francisco State College and University of California faculty to (a) develop general policy; (b) iron out formal admission policies; (c) screen applicants for admission; (d) provide for student guidance and program plans and (e) develop plans for future operation.

2. A hampering factor throughout the 1967-68 year was the long delay in the University of California's attempt to employ a special education counterpart professor. After a long search, Dr. Eli M. Bower, formerly with the National Institute of Mental Health, was appointed to this position on August 15, 1968.

3. Some differences in philosophy have had to be resolved and are still in the process.

Criteria for Admission

1. Personal interview whenever possible.
2. Upper division and undergraduate grade point in major of 3.0.
3. Graduate work grade point average of 3.2.
4. Graduate Record Examination scores ranging from 1,000 to 1,100 raw score with preference shown to students having a verbal score of 600 and a quantitative score of at least 500.
5. Three letters of reference from professional people.
6. Statement of intent from the student.
7. Preference shown to candidates under 40 years of age.

The Second Year of Operation (1968-69)

Commencing in September, 1968, there were eight students enrolled in the program. Five are first-year students completing residence requirements on the San Francisco State campus and three are second-year students on the Berkeley campus. Frequent joint faculty conferences to facilitate the smooth flow between the two facilities are being conducted.

Two advanced seminars in special education and two parallel field internships are being presented on an experimental basis this year at San Francisco State College.

An increase in library holdings has been made possible in the work load budget for the doctoral program in spite of financial limitations in overall budget provisions to the state colleges.

Improved liaison between the two institutions is resulting from the recent appointment to the University of California faculty.

Further exploration of the interdepartmental relationships is being done to increase the scope and opportunity for latitude in student program planning.

Some Observations Regarding the Program

The 1969-70 proposed budget for San Francisco State cuts one of the two doctoral staff positions to a nine-month level. The other position is already on this basis. This is unfortunate since students who take leave from employment to pursue their studies cannot afford to interrupt their program for a summer. The University of California is on a quarter system while San Francisco State is on a semester system. Students attending jointly are prevented from having the opportunity to consult with faculty when they need them. The reinstatement of the 12-month position in the San Francisco State budget has been requested.

Because of the difference in calendar systems at both institutions, careful student guidance is a major concern of the doctoral faculty as well as the students. Now that the University of California has provided the faculty, more effective participation in guiding the students is possible.

To date, the teacher-pupil ratio is one faculty position to four students. It is anticipated that we will maintain no higher a ratio than one to six in the third year and thereafter. This is because the number of students admitted to full-time study at the present time is four per year. If the staff allocation increases, we will correspondingly increase the admission of qualified students.

In order to provide for more awareness of student interests and needs, the joint guidance committee consisting of faculty members from both institutions also includes two doctoral students, one representing the first-year students and the other the second-year students. An informal student group including all of the doctoral students has been organized so that communication and discussion regarding their programs is possible.

The individual student's doctoral committee will be formed when he has passed the comprehensive examinations and is ready to start his research. The committee will include representatives from both schools. Since no students have yet reached this point, we have no history on which to rely but, as with any new program, will undoubtedly encounter problems.

It is a very stimulating experience to be involved in such a program. The faculty feels most fortunate in being involved during its formative period. One member has been involved since the first preliminary discussions took place some seven years ago. Considerable flexibility is permitted in the program, and we see this as a most appropriate way to meet the individual needs and interests of students in their preparation for leadership roles in special education.

GUIDELINES FOR STANDARDS FOR ADMISSION TO DOCTORAL PROGRAMS IN SPECIAL EDUCATION

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An increasing number of applications for admission to doctoral study in special education suggests the need for an evaluation or re-evaluation of current doctoral admissions standards. On the basis of past and present experiences, it is postulated that a more precise and relevant method can be developed for assisting admissions committees in screening and admitting potential candidates for doctoral study.

With the emerging autonomy of special education departments, in some universities, greater responsibility for these departments in setting admission standards has developed. In other universities the admissions standards may still be primarily controlled by the university or college graduate office or the institution's education department. Regardless of whether the control of doctoral admissions rests with the Special Education Department, the Graduate School, or the College of Education, it appears to be of importance, to this writer, to examine the topic in some detail.

Some Premises

It is quite apparent that admissions standards should not be based on single criteria such as Millers Analogy or years of experience. Secondly, it appears that even objective criteria are imprecise in predicting an individual's potential contribution to the field of special education. Thirdly, it becomes apparent that a multi-information approach relevant to the proposed candidate for admission should be considered. In the following paragraphs the writer will attempt to describe and discuss an orderly approach embodying both precise information and subjective evaluation in the process of admitting candidates to doctoral programs in special education.

General Considerations

Upon successful completion of a doctoral program, the proposed candidate will, to a large degree, become a representative of the university from which he matriculated. Therefore the personal qualities of the candidate deserve attention. The qualities to be looked for in such an individual are too numerous and varied to permit a complete listing, even if they could all be delineated and described. However, personal characteristics with respect to appearance, poise, emotional stability, social adjustment, and other character traits are among qualities to be considered.

A second general area of consideration evolves around the candidate's projected goals. Several questions can be asked at this point:

1. Are they realistic?

2. Do they relate to the university's general philosophy?
3. Are the goals congruent with needs and demands in the field of special education?
4. Can the goals be accomplished within a reasonable period of time?
5. Perhaps most important, is there a relationship between the candidate's previous experience and qualifications to his projected goals?

Of equal importance, to personal qualities and projected goals of the candidate, is a realistic appraisal of the university's resources for providing an adequate program and training environment for the potential doctoral candidate. The most important resource in the doctoral program is the departmental faculty. The individual and group competencies, of the faculty, in understanding and communicating knowledges from diversified disciplines and areas of special education, are crucial pieces of information that must be considered in relationship to doctoral programs and prospective candidates.

Objective Information and Precise Criteria

As mentioned previously, precise areas of information and precise criteria for precise cut-offs are not by themselves sufficient for selecting candidates for admission to doctoral programs in special education. However, guidelines for identifying areas of information to be evaluated and tentative cut-off points can be of assistance in screening large numbers of candidates for doctoral admissions.

The following guidelines have been developed by this writer, based on experience participating in doctoral admissions committees and previous information accumulated from contact with several midwestern universities.

OBJECTIVE RATING

Area of Information	*Performance*	*Rating*
I. ACADEMIC POTENTIAL		
A. Undergraduate GPA	3.25 and above	+
	2.75 to 3.24	0
	Below 2.75	—
B. Graduate GPA	3.50 and above	+
	3.20 to 3.49	0
	Below 3.20	—
II. VERBAL AND WRITTEN EXPRESSION		
A. Scholarly Writing	Master's thesis or Major Publication	+
	Field Study or Major Paper	0
	No written materials	—
B. Millers Analogy*	80 Percentile and above	+
	60% to 79%	0
	Below 60 Percentile	—

*National Norms, Education

III. EXPERIENCE		
A. Classroom teacher or direct clinical experience with handicapped; or	3 or more years	+
	Less than 3 years	0
	None	—
B. Supervisory, Administrative or College Teaching in area of Education for the Handicapped.	3 or more years	+
	Less than 3 years	0
	None	—
IV. RECOMMENDATIONS		
A. From previous employers or academicians with whom candidate studied. (Evaluation of recommendations is perhaps more subjective than objective in nature. However, mild or negative recommendations for a potential candidate need to be studied thoroughly.)	All Positive	+
	1 Negative	0
	2 or more negative	—
V. AGE		
It is expected that the candidate will complete requirements for the doctoral program at an age which allows him an adequate period of service after the awarding of the degree to warrant the university's investment in his professional preparation.	25-35	+
	36-44	0
	Over 45	—

Using the suggested objective rating scale can be of value in the original screening of candidates for doctoral admission. Dependent upon a given university's specific requirements and/or general philosophy, the described scale can be adjusted. A suggested method for computing a +, 0, — rating scale is to consider a 0 rating to be neutral and that a + rating neutralizes a — rating. Therefore the candidate would receive a 1+, 2+ or —1, —2 cumulative rating. An individual with a 0 or less cumulative rating would appear to be a poor risk as a candidate for a doctoral degree. Depending on the specific requirements and/or general philosophy of a university, a 2+, 4+ or higher cumulative rating might be considered minimal. The projected goals of the applicant may also affect the relative ratings of the areas of information considered.

Relevant Judgment

To this point the discussion has primarily centered around types of information, objective and subjective, that should be accumulated and dis-

cussed. The final stage has been reached. The judgment needs to be made of the merits and shortcomings, objective and subjective, of the potential candidate for doctoral admission. The means and by whom the decision is reached is of vital importance. It is this writer's contention that the prime emphasis for decision-making power should be placed in a panel of competent judges. This panel should be representative of the university's professional training interests, research interests, and graduate student interests. It should be a balanced panel, representing experience and wisdom, and representing current throught, creativity, and trends in education.

The panel should take into consideration the candidate's past performance, both personally and professionally. They should examine both the subjective and the objective information relevant to his potential as a doctoral candidate and his prognosis of making a contribution to the field of special education. The panel should carefully examine the projected goals of the candidate, i.e., research, teaching, administration; in view of his past experience, personal qualifications, projected study program and probable opportunities of placement in a position, requiring his area of specialization, upon completion of his degree.

The panel should be completely aware of the resources of their own university. Of particular concern is the relationship between a candidate's proposed training program and relevant training, experiences, and other resources available in the university setting. With the continual rise in the emphasis on advanced degrees together with the seemingly greater competencies of today's candidates, the panel and the department will need to be judgmental in regard to total numbers that can be carried at any given time by their university's Graduate Study Area in Special Education.

I am personally impressed with the competencies and the qualities of today's student in special education. It is my premise that a competent panel of judges, equipped with guidelines for admissions standards, will truly have a monumental task in reaching decisions as to who should be and who should not be admitted to doctoral studies in special education.

A TAILOR-MADE DOCTORAL PROGRAM IN SPECIAL EDUCATION

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In the eight hundred years of their existence in the West, universities have been a catalytic agent for external change; but from their very inception, they have had considerable difficulty in changing themselves to meet the demands of each new period. There are strong indications today that change within our institutions of higher learning is called for, and yet it is either slow in coming or nonexistent. Harold Howe has characterized our plight:

> Higher education today represents a striking contradiction, an extraordinary paradox for which you people are largely responsible. What I have in mind is the proposition that professors who live in the realm of higher education and largely control it are boldly reshaping the world outside the campus gates while neglecting to make corresponding changes to the world within. As a result of this neglect of the campus world, many of the students who inhabit it have become disenchanted. They are disaffected and disgruntled with what is going on in the universities; and they cannot understand why university professors who are responsible for the reach into space, for splitting the atom, and for the interpretation of man's journey on earth seem unable to find the way to make the university pertinent to their lives.[1]

Many problems, as seen from the student's point of view, are related to the difficulty in developing an identity as a unique and creative human being while functioning as an impersonal organism within the large bureaucratic structure of the university.

A sense of this feeling is expressed in an advertisement placed by students in the University of Washington *Daily*:

> Why should a community of scholars be run like General Motors? Return the leadership of the University into the hands of men whose chief concern is the pursuit of knowledge in close contact with their students, not the erection of bureaucratic empires. . . . The Student Committee for Non-Violent Return to Academic Values.[2]

It is bad enough that this situation exists on the undergraduate level, but when it also occurs in graduate schools, the problem becomes critical;

for here the training of leadership personnel takes place. Since we expect future leaders to be unique and creative, mass produced curricula appear to be inappropriate.

Existing Patterns: Derivative, Not Innovative

Special education from its inception should have afforded an opportunity for exploration of individualized programs of instruction for leadership personnel. Because this was a new academic entity and one that puts high priority on the individualization of instruction, one might have hoped for practices in higher education consonant with the ideals of the field. Since the leaders coming from doctoral programs in special education are expected to maintain delicate and often controversial roles within the changing social system, ample opportunity for creative thought unhampered by long existing traditions might have been expected.

Unfortunately, existing patterns of doctoral programs in special education can be better characterized as derivative than innovative. Such conventions as language requirements, course lists, and residency have been transplanted from traditional programs with little concern for their applicability to a new field.

Aspects of the Proposed Program

The Special Education Area of the University of Washington is currently exploring a new approach to education at the doctoral level designed to remedy some of these problems. A tailor-made doctorate is proposed which would match the needs of the field and the skills of the faculty with the talents and interests of the individual doctoral student.

The first step in this process calls for the advisor and the student to develop a schedule of behavioral objectives. In arriving at a behavioral objective, they must come to an understanding of the student's entering behaviors. These would consist of his academic strengths and weaknesses, former education and relevant work experience with consideration given to the student's personal strengths and weaknesses such as potential and desire for administrative responsibility.

The student is involved from the very start in setting forth tailored behavioral objectives. This will facilitate early selection of the student's doctoral committee as well as of his sponsor. When this faculty committee is satisfied with the statement of objectives and their planned implementation, the student will begin course work. This will serve to guarantee a commitment on the part of the student to special education rather than placing top priority on the acquisition of a degree.

As a result of the interaction process delineated above and employing the information so gathered, the student will then be encouraged by the advisor to derive preliminary general post-doctoral occupational goals. As a written program is prepared, a series of clauses add further specificity by detailing those academic pursuits necessary for reaching the global objective. Under each specific clause in the written program, those classes relevant to

reaching the desired competency are listed. The dissertation topic is also selected and considered as the capstone of an integrated goal-directed program.

As the student proceeds through the tailor-made doctoral program he will constantly check on his operational progress with the help of his doctoral sponsor. They will cooperatively modify the program when such modification is called for. The behavioral objectives, when stated in operational terms and implemented, are thus assessed in an ongoing process of quality control. Instead of a series of mechanical and often unrelated hurdles, the student is evaluated in terms of his progress toward stated objectives. The dissertation would then become a culmination of all that has come before in the person's doctoral program course work as articulated with his experience in the field. The dissertation will then have validity as a final piece of quality control, the final educational demonstration in the individual's doctoral program.

To this point we have dealt with some of the theoretical considerations behind the tailor-made doctorate and the process of preparing the written program. The remainder of this paper will be devoted to exploring aspects that need to be dealt with in order to make such programs operational.

Some Needed Changes

In a university serving more than 30,000 students, it is virtually certain that some procedures ostensibly designed to permit an orderly progression through various traditional programs will serve to block progress toward the establishment of an interdisciplinary effort. Paramount among these would be grading procedures and course prerequisites. The doctoral student in special education cannot be expected to compete with majors in various schools and colleges for A's and B's. The pass-fail system must be instituted if the interdisciplinary approach is to succeed. The special education student may be taking a course in neurology in order to become acquainted with a new technical language rather than as a step in preparing him to be a neurologist. He must, therefore, be graded accordingly.

The matter of course prerequisites must also be handled on an individual basis. A student may need to fulfill the prerequisite requirements; however, the standard prerequisites are often unnecessary in order for the student to obtain from a given course that which contributes to his development. A system of preauditing can be built into the tailor-made doctorate, obliging the student to preview the course and, prior to his own enrollment, talk to the professor and gauge the extent of preparation. This will insure both his ability to profit from the course as offered and assess the relevance of the material to his objectives.

Changes in advisement procedures must accompany the institution of the tailor-made doctorate. High priority must be given to this function when an allocation of the professor's time and energy is considered. This is necessitated by the additional time and effort required of the advisor in facilitating such an individualized program. The mentor must be knowledgeable not only about matters pertinent to the student's development within

the University milieu but also about the ever-changing needs of the field. If a professor is expected to carry a full teaching load, do research, or have administrative responsibility, it is recommended that he have no more than five students in tailor-made programs at various stages. If the students are all at the beginning stage, three would seem to be the maximum load. Though this would tend to restrict the number of students beginning a doctoral program, it seems probable that it would increase the number completing it.

Advisement plays the most essential role in facilitating a student's progress through the program and requires a degree of knowledge and commitment on the part of the faculty member which exceeds that required in traditional programs. It is, therefore, essential that professors undertaking this responsibility be adequately prepared. Advisement procedures within the department must be developed, and faculty members must be trained in these methods to insure that each student receives the optimal of advisement.

In conclusion, we would like to quote from Frankel's "Student Power: The Rhetoric and the Possibilities:"

> Thus, the question raised by present demands for student power is not really whether students should finally be given the right to say something about what happens to them. It is whether it would be educationally desirable to create arrangements permitting students to participate more visibly and formally in the making of educational decisions.[3]

We of the Special Education Area of the University of Washington feel that the tailor-made doctorate is not only educationally desirable but essential.

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[1]Harold Howe, "Higher Education's Strange Paradox," *AAUP Bulletin*, June, 1968 (summer issue).

[2]The Student Committee for Non-Violent Return to Academic Values. University of Washington *Daily*, Tuesday, November 12, 1968.

[3]Charles Frankel, "Student Power: The Rhetoric and the Possibilities." From the forthcoming book, *Education and the Barracades*. W. W. Norton. *Saturday Review*, November 2, 1968.

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Frankel, Charles, "Student Power: The Rhetoric and the Possibilities." From the forthcoming book, *Education and the Barracades*. W. W. Norton. *Saturday Review*, November 2, 1968.

Howe, Harold. "Higher Education's Strange Paradox." *AAUP Bulletin*, June, 1968 (summer issue, Vol. 54, No. 2).

APPENDIX A

UNIVERSITY OF WASHINGTON
College of Education

Vita:

Name:

Age: 32

Academic History:

1966—B.A. in Education
1968—M.Ed. in Special Education

Professional History:

1966-69—Special Education Teacher, T.T. Minor Elementary, Seattle, Washington—Educable Mentally Retarded Class in Title I school

General Academic Goals:

College teaching in Special Education with emphasis on educational strategies for handicapped learners and development of behavior modification systems for classes of exceptional children.

College teaching in Special Education with additional emphasis on leadership training, statewide planning, and innovation in special education teacher preparation.

Specific Academic Goals: Specific courses would include selections from the following courses:

Educational Strategies for Handicapped Learners:

Ed. 403	—Education of the Emotionally Disturbed
Ed. 405	—Educating the Mentally Retarded
Ed. 407	—Teaching the Gifted Child
Ed. 409G	—Teaching Language to the Deaf
Ed. 548	—Educational Implications of Personality Theory
Ed. 416	—Evaluation of Instructional Materials for Exceptional Children
Ed. 418	—Vocational Development of Handicapped Children and Youth
Ed. 504A	—Psychology of Reading
Ed. 504B	—Verbal Instruction
Psych. 400	—Learning (5)
Psych. 401	—Verbal Learning (3)
Psych. 403	—Motivation (5)
Psych. 410	—Deviant Development (3)
Psych. 412	—Learning and Motivation in Children
Psych. 447	—Psychology of Language (5)
Psych. 555	—Seminar in Programmed Learning (2)
Ed. 406	—Teaching Reading to the Slow Learner (3)
Ed. 442	—Reading Disability Clinic (3-5)
Ed. 425	—Reading Disability: Remedial Techniques (3)
Ed. 505	—Reading Disability: Etiology and Diagnosis (5)

Behavior Modification Systems for Classes of Exceptional Children

Background

Ed. 411 —Learning Disabilities
Ed. 511 —Behavior Modification of Exceptional Children
Ed. 500 —Field Study

Leadership Training

Ed. 508 —Administration and Supervision of Special Education
Soc. Wk. 401—Principles of Interviewing
Soc. 442 —Public Opinion
Soc. 447 —Social Control (5)
Soc. 451 —Social Change and Trends (5)
Soc. 365 —Urban Community (5)
Soc. 463 —American Negro Community

Statewide Planning

Background

Ed. 410 —Educational Sociology
Ed. 414 —Education in the Inner City
Ed. 510 —Seminar in Educational Sociology
Ed. 496 —Comparative Education
Ed. 539 —Law and Education

Innovation in Special Education Teacher Preparation

Background:

Ed. 506 —Internship in Special Education
Ed. 552 —Improvement of College Teaching
Ed. 556 —Internship in Higher Education
Ed. 570 —Theories of Instruction
Ed. 571 —Seminar in Strategies of Instruction

Where:

Ed. 402 —Human Development and Education
Ed. 513 —Clinical Appraisal of Exceptional Children

Dissertation:

Development of a course in the teaching of special education with emphasis on statewide assessment of current status and needs, educational strategies, and behavior modification of classes of exceptional children.

This course would be an upper-level undergraduate course offered in addition to Ed. 404, Exceptional Children, and would be designated to interest education students in the field of Special Education and provide them with the knowledge and motivation necessary to accept the challenge of the exceptional child.

This course would include field work with minority groups, handicapped people, special education classes, etc.

PLANNING DOCTORAL PROGRAMS

Anne Welch Carroll
Coordinator of Special Education
University of Denver

During the past two days we have explored the past and present status of doctoral programs in special education. I now would like to briefly plan the future of such programs. What is the future to be like? How will we live? How should we alter the conditions of living in that future? Such questions have held fascination for mankind and challenged his speculative fancy as far back as recorded history runs. Man has never ceased to wonder how he can understand and affect his own future, and what he needs to do to prepare himself and his children for it.

Some general factors which might influence possible future changes would be: (1) the social-cultural environment in which we will be operating, (2) the organization of plan for change, (3) the utilization of the most effective change processes, (4) how we will employ our value systems in the action we take, and (5) how to translate these actions into decisions at the institutional level.

Planning for the Future

A few years ago, many people would have decried a proposal that we should attempt to plan for the future. Today, probably few would oppose the concept of planning, but many apparently still believe we could make the adjustments we need as time moves on and see no particular need to devote time or effort to planning. These people may not recognize that the situation has changed at least in the following respects:

1. We know that many changes will occur with or without planning; such as population increases, continued depletion of certain natural resources, and greater urbanization.

2. Through planning we can project alternative goals and courses of action that would be appropriate to the attainment of these goals.

3. We now have available many of the tools and skills needed to plan effectively, and also to recognize and avoid some of the previously unrecognized pitfalls in planning.

A major question still unresolved for many people potentially interested in planning is "How can we plan for a world we cannot foresee?" The dilemma is apparently not as serious as it may seem. One authority has pointed out that those engaged in long-range planning need not try to predict the exact course of events. Instead, their purpose should be to make reasonable assumptions about the future based on the best evidences available; for example, two or more assumptions about any trend or prospective development may be accepted as reasonable and tentative plans developed for each

feasible alternative. Thus we can be much better prepared to meet the situation and needs than if we had not planned.

In other words, these assumptions should provide the basis for developing what some authorities call guiding predictions. These should not attempt to describe the world as it may be at any particular time in the future, rather they should serve as guides for predicting and for evaluating the consequences of feasible alternative courses of action.

Some General Assumptions Relating to Society

The evidence strongly indicates that such assumptions as the following relating to prospective developments during the next 10-25 years seem defensible and may be used as a background for planning:

1. Man, himself, is not likely to change significantly in basic respects. Some will tend to become selfish, ruthless, and irrational. Others will be kindly, considerate of others, and relatively rational.

2. Information potentially available to all will increase somewhat in geometric progression, will probably double every 10-15 years, but so will our ability to store and retrieve information. One of our problems in educational institutions and society will be to select and utilize effectively the most pertinent and significant information in arriving at decisions and to learn how to avoid being confused by the irrelevant and inconsequential.

Some General Assumptions Relating to Education

Similarly, on the basis of evidence already available, we can make a number of defensible assumptions about education that can be used as a background for planning.

1. If education is to become more effective, goals must be stated more clearly and meaningfully, and means of achieving them must be carefully developed.

2. The emphasis will be on "learning" not on "teaching" in the traditional sense.

3. Major aspects of curriculum will probably be much more oriented to occupations and professions in contrast with the traditional college or academic orientation.

4. Programs for the preparation of teachers of higher education and administrators will need to be significantly reoriented to enable them to provide effective leadership, participate constructively in planning for the future, and learn how to help students prepare for change.

5. Institutions of higher learning will need to develop an organization, often quite a different organization than at present, and methods of operating better designed to meet the changing needs. New insights will lead to, and make necessary, new patterns and procedures.

Planning for the future in doctoral education involves both identification and acceptance of appropriate long-range purposes and goals in the

development of suitable steps and procedures for attaining these goals. Seldom can all aspects of a comprehensive plan be implemented at one time. Thus, priorities must be established. Often some changes need to be made before others become feasible, or some are considered more urgent than others.

One observer has noted, "One of the most effective ways of pursuing change is for men to imagine some future they would like to live within and to act in the present day some part of that future, not merely to plead for its creation."[1]

History in the Making

Those who are involved in educational planning at the present time find themselves facing virtual torrents of pressure to change. This situation results from the historical confluence of three major streams of change, any one of which by itself would pose a major challenge. The three streams are social change, educational change, and technological change. Some dangers are: (1) that we will be swept along without the ability to choose the most appropriate course, rate, or destination, (2) that we will look at what is happening without all the forces, or without considering the interaction.

A few of the important and often inadequately clear problems, pitfalls, and other factors relating to fight for change are discussed as follows:

1. *Interpreting accurately the science of the times.* An accurate interpretation of the science of the times is important for every group engaged in planning. Any serious misinterpretation is certain to result in major problems and difficulties.

One pitfall is planning for a world that no longer exists. Frequently we may be reminded of our tendency to do what is called "Neanderthal thinking."[2] A major pitfall facing this present, or any, generation of planners is its "built-in" tendency to view the future in a frame of reference suited to an already outmoded present and past.

Some steps to possibly avoid this pitfall would be as follows: (a) assume that people do only things that make sense to them regardless of how ridiculous their behavior may appear to us, (b) discuss openly and freely the nature of the problem of seeing things as they now are rather than as they once were, (c) build observation of feedback mechanisms into the planning and study processes so that they will be evidence of what is going on, (d) consider carefully the question as to whether we are being "Neanderthal" about an issue, and (e) involve students in work, being attentive and responsive to them.

The second pitfall is thinking that this is the same problem that one has encountered in the past, only bigger. The third pitfall is thinking that the solution to the problem merely requires a larger "dose" of remedies previously utilized.

2. *Effecting change.* Even those who are familiar with most of the strategies for change may fail to recognize that the strategy may be effective under certain conditions, but may not work under others, or an appropriate

combination of strategies may be needed to map a single approach. The pitfall here is excessive reliance on a single approach to the solution to the problem. The second pitfall would be failure to recognize and take into account changes taking place in the role of general education. "Education generally appears to be emerging from its protective cocoon and to live in the political-social-economic market place."[3]

Patterns in Programs

Dr. Byron W. Hansford, Commissioner of Education for Colorado, commented in response to the question "What sort of instructional personnel structure do you foresee?" In the future we may be looking for the instructional teams with strange titles such as "stimulator"—one who stimulates intellectual curiosity and starts with the learning, "remedial specialist or personalizer"—one who helps students with individual problems, "learning materials and equipment facilitator"—one who is in charge of selecting and applying the proper materials and equipment, "programmer"—the writer—the one who helps to develop new materials to meet the needs of the students, "large group presenter"—one who makes presentations through ETV or other media to large groups of students, and "research"—one who synthesizes research results and conducts needed research to improve teaching-learning operation.[4]

It is important that we in special education take a look at some of these changes in general education to see how our students will be prepared for the world of the future. Where will the people we prepare fit in, either in institutions of higher learning or as administrators in special education?

Another aspect of long-range planning would include an awareness of the general mobility of our society. This can be both physical and vocational. Certainly, modern modes of transportation have made the world accessible to everyone. In minutes, individuals can move from one cultural environment to another; consequently, individuals need to develop competencies in understanding both one's culture and that of others.

Statistically, the individual will change occupations throughout his lifetime. Individuals entering one professional setting today will not necessarily continue in the setting for a lifetime, nor will the individual be able to cope with changes in the occupational skills brought about through innovation and technology unless he continues to grow educationally.

Each person, then, has a definite responsibility of working in areas which prepare completely new skills in different periods of his own work career. We in instutions of higher learning must persist in facilitating these transitions.

The human enterprise becomes the important part of the teaching-learning process of individualization and program-planning focused on the different abilities of students. And professors must assume major emphasis if education is to succeed in the 80's. Innovation can result in meaningful experience when given purpose, direction, and a base in human need. Trying on life and changing one's ways to fit what one is learning continues to be the objective of the learner throughout life.

General Concerns for Doctoral Programs

My observations of the discussions during this conference might be summarized as follows:

1. It is altogether proper that, in our graduate programs as in most graduate schools, requirements for the Doctor of Philosophy are not set out in terms of hours or prescribed curricula or quantitative rigid patterns. They are set out in terms of a program of study to be worked out by the student and his major and minor advisors, to be reviewed by a faculty committee appointed individually for that student, and by a standing faculty committee in the appropriate area of the graduate schools, if the program fits this individual student and his particular field of knowledge.

2. The pattern of organization which is splendid for one university may be quite poor for another institution; therefore, the pattern must vary according to the organization.

3. The best thing that can happen to any of us, of course, is to get good students, the kind that will do well and will actually teach themselves and us too, no matter how we stand in their way. Such students do good work, and are a contribution to society, and we get the credit.

4. In these days of expanding graduate education, there is a real need for establishing criteria for guidance. They are very difficult to set up, and there are many problems and dangers involved, as have been mentioned in the past two days, but these criteria are greatly needed.

Summary

In summary one might ask, "Just what is the nature of our area?" Is it a respectable discipline or isn't it? This is a question that occurs in many areas of a university and many areas of the graduate school.

Sometimes it is useful to think about basic disciplines as distinguished from interesting problem views. For example, some time ago it was properly asked whether statistics was a discipline or whether it was just the application of methods in numerical analysis and concepts of probability to problems in the reduction of data and the design of experiments.

There is constant change. We do get new problem areas. We get interactions between established disciplines. This is a normal phenomenon in this useful operation of classifying knowledge. Sometimes we think we have an emerging discipline and it turns out otherwise.

It is to be hoped that we will not worry too much about whether we are a discipline or not. There is no question but that we are concerned with a fascinating area of problems and that we do draw upon underlying disciplines which apply to these problems.

It is also to be hoped that we keep in mind that we do need to have understanding in attacking problems and that we should make sure that we understand and use the underlying tools which are available in the storehouse of knowledge.

Some questions I have concerning doctoral programs in special education include three basic issues: roles, curricula, and organization and administration.

Devise Roles

1. Is the role of a doctorate in special education distinctive or subscreened under another area?
2. For what kinds of activities should doctoral students in special education be prepared? (Administration or research or teaching?)
3. To what extent should roles in doctoral programs in special education be determined by external forces? (Certification, accreditation requirements, sources of finance, roles of other specialists?)

Curricula

1. Should there be a common core for all students?
2. Should there be an agreed upon designation and content of specific courses such as suggested by Kirk and Gallagher?
3. To what extent should curricula be influenced by external forces?

Organization and Administration

1. In what department of what school is the doctoral program in special education most appropriately found—what about interdepartmental sponsorship?
2. What size and level of staff, and what extent of investigative resources, are required for doctoral education?
3. What is the role of intra- and inter-institutional sources of support in limiting or enhancing the doctoral program?
4. What is the role of the specialist 6-year program in education?
5. Is a doctorate in special education necessary?
6. What about post-doctoral work?

In closing, I would like to say that this field is dynamic. Static solutions will not suffice for the problems of tomorrow. So, as our discussions proceed, more complete facts are gathered as a basis for decision, and insights will grow into the nature of our discipline and what it can ultimately mean as a unified body of scientific workers with basically humanitarian purposes. Hopefully, we, in planning doctoral programs, will move from the "apostle stage," the "trial and error stage," and eventually to a "realistic scientific stage" based upon the best available research information concerning the effectiveness of our product. It would appear that many of us are currently in the second stage of evolvement.

Conferences of this type do not settle anything finally. But they do

cut away much underbrush, reflect the value of honestly motivated interchange, and provide an impetus to continuing soul-searching and confrontations with basic issues which will make our self-understanding and contribution to the general welfare greater in 1980 than in 1968.

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[1]Fred Charles Ilké, "Can Social Predictions Be Evaluated?" *Daedalus*, summer, 1967, p. 741.

[2]John Gardner. *Self Renewal: The Individual and the Innovative Society.* New York: Harper and Row Publishers, 1964.

[3]Robert Chin, "Basic Strategies and Procedures in Effecting Change," *Planning and Effecting Needed Changes in Education.* Denver, Colorado: Designing Education for the Future, 1967, Chapter 3.

[4]Byron Hansford, "Planning Improvements in Education," *Planning and Effecting Needed Changes in Education.* Denver, Colorado: Designing Education for the Future, 1967, Chapter 2.

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IN SPECIAL EDUCATION
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Tucson, Arizona

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